



Premium Iron Ore

For a decarbonising iron & steel sector

121 Mining Investment Conference

October 2022



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ADDITIONAL INFORMATION

This presentation should be read in conjunction with the Annual Report at 30 June 2021 together with any announcements made by MGT in accordance with its continuous disclosure obligations arising under the Corporations Act 2001. Any references to resources estimations should be read in conjunction with MGT's Mineral Resources statement for its Magnetite projects at 30 June 2021 and subsequent releases to the Australian Securities Exchange as referenced.

MGT confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of mineral resources and ore reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. All amounts within this presentation are stated in Australian Dollars consistent with the functional currency of MGT, unless otherwise stated. Tables contained within this presentation may contain immaterial rounding differences.

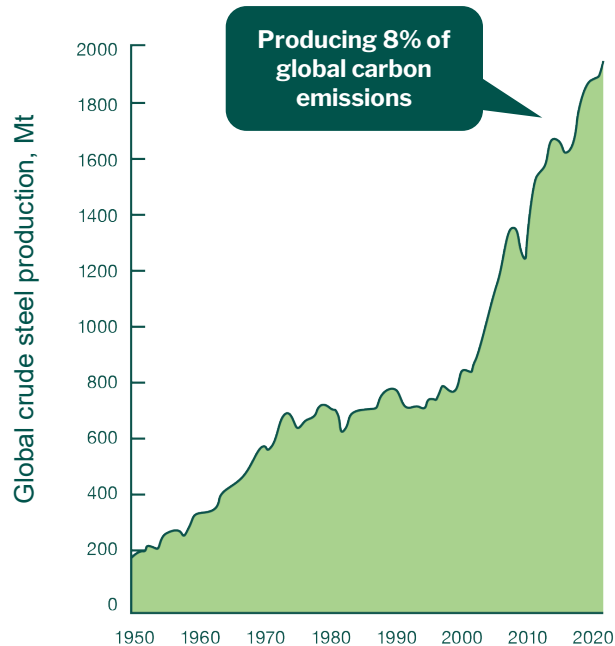
ACKNOWLEDGEMENT OF COUNTRY

Magnetite Mines, our shareholders and our stakeholders acknowledge the Ngadjuri People as the Traditional Owners of the lands on which the Razorback Iron Ore Project is located. We respect their continuing custodianship of this Country, and their spiritual and cultural beliefs and practices.

Iron & steelmaking is evolving

Continuously rising demand in direct conflict with global decarbonisation

Steel production has doubled every 20 years¹

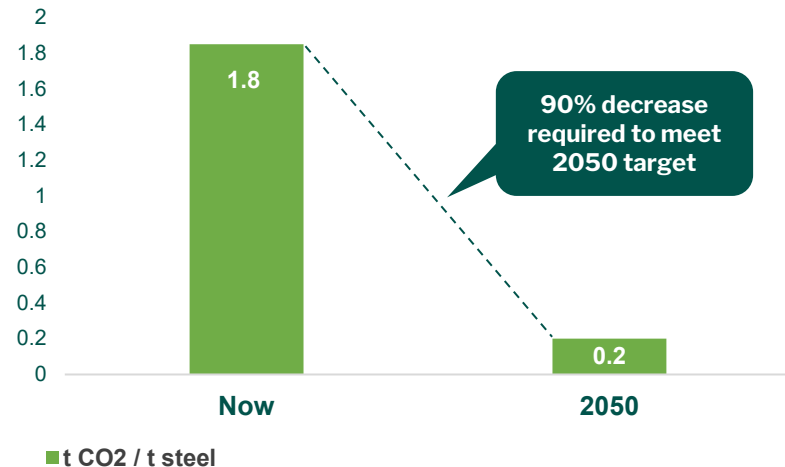


© 2022 World Steel Association

However, decarbonisation is now mandated

- Paris Agreement 1.5°C scenario requires systemic change
- 140 countries have committed to net zero by 2050 (COP26)
- Energy coal use phasing out over same period (COP26)

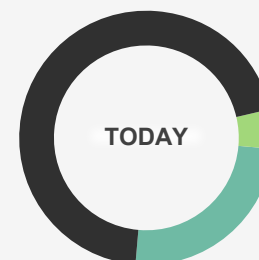
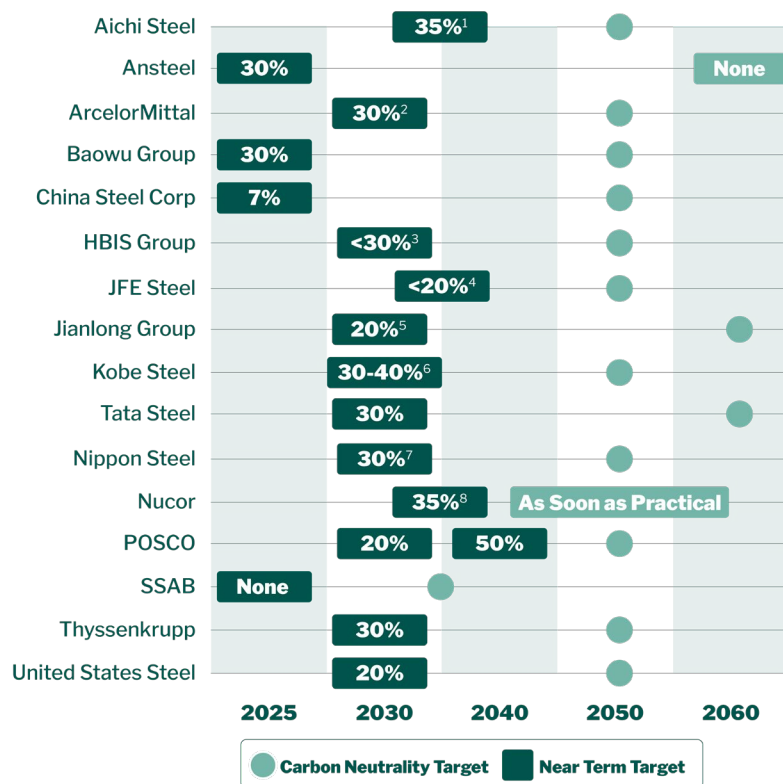
Global steel production carbon intensity²



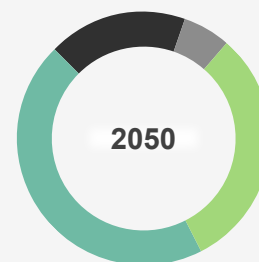
Decarbonisation in iron & steelmaking commenced

Direct Reduced Iron (DRI) essential to transition

Major steel producer carbon reduction targets



~100 Mtpa
DR-grade pellets

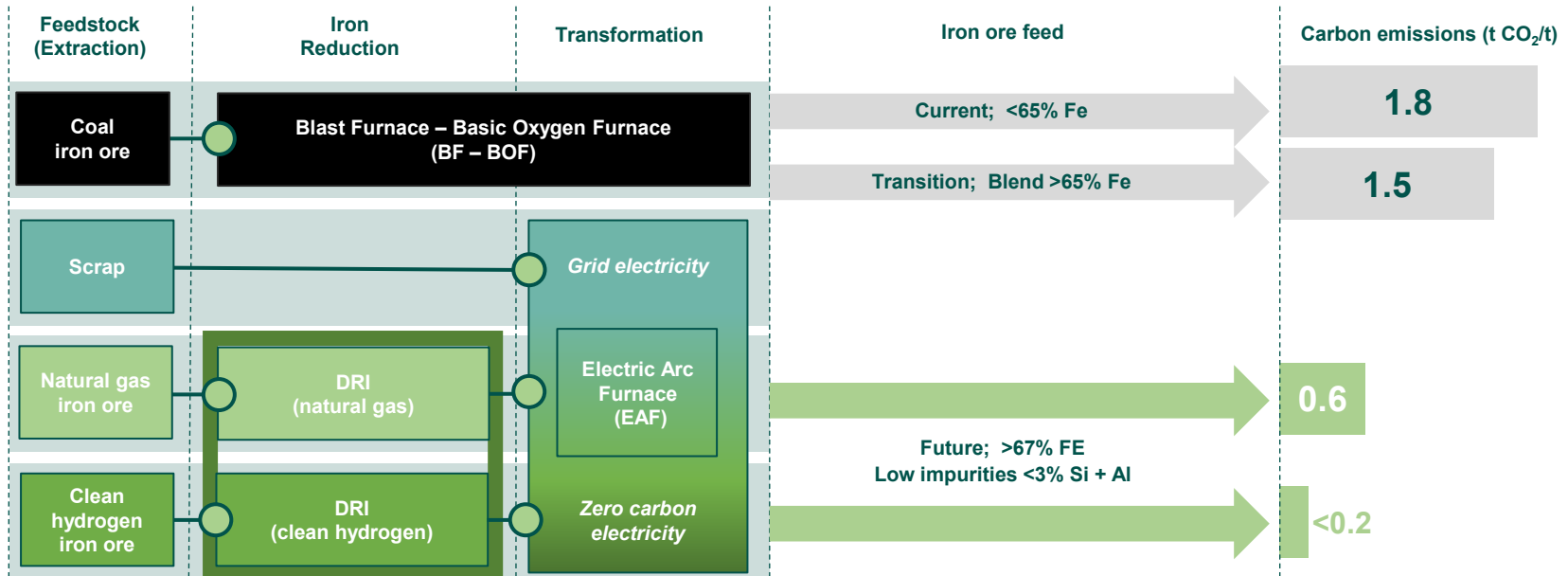


~1,000 Mtpa
DR-grade pellets

High-quality feed necessary to make the change

Low-emission iron & steelmaking requires high-grade, low-impurity iron ore

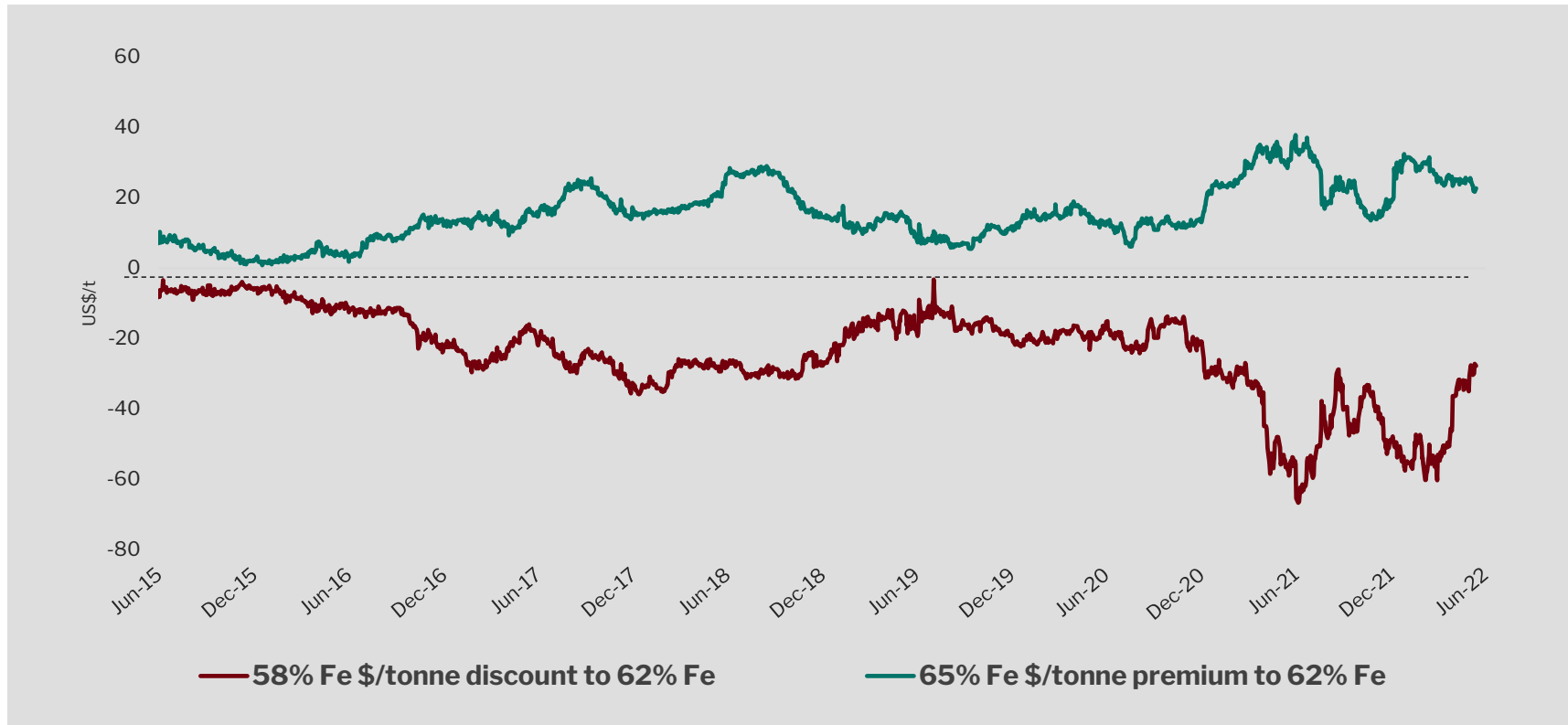
Steel manufacturing technologies³



Demand for high-quality ore is gaining pace

High-grade and low-grade iron ore prices are diverging

Fastmarkets iron ore index grade spreads (US\$/tonne)



Premium quality iron ore is first quartile competitive

De-risking exposure to commodity price cycle downturns

Razorback premium iron ore

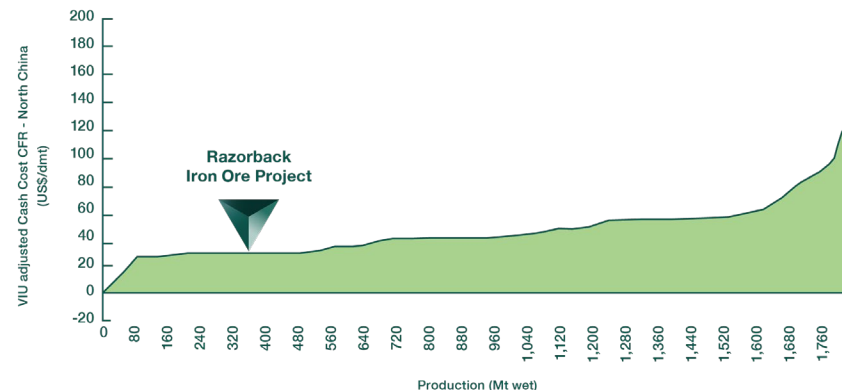
- DFS concentrate grade assumptions based on extensive metallurgical testwork
 - 67.5% Fe with 4.5% (Si + Al)
- Product competitive with current high-grade concentrate in the market

Potential to produce DR-grade product

- Optimisation studies underway
- Early testwork results on Iron Peak ore include:
 - 69.7% Fe with 2.6% (Si + Al)
- Low phosphorous (vs high in Pilbara ores)

First quartile cash costs (62% Fe equivalent)

VIU-adjusted total cash cost^{a,b} curve - CRF north China



Source: Wood Mackenzie, Magnetite Mines

a) Accounts for product premium or discount based on grade / specification

b) Cash costs calculated in 2022 dollars using the Single-Step Expansion case from Expansion Study, March 2022

Magnetite concentrate to replace direct shipping ore

The Braemar – a globally-significant magnetite province



The Braemar advantage

- Outcropping ore: very low strip ratio
- Siltstone-hosted iron ore, not BIF*
- Soft relative to WA magnetite ores
- Concentrates to premium grade iron ore
- Undeveloped, low intensity pastoral country

Substantial resources

- ~2,000km² total iron ore tenements
- 4.2Bt Razorback Resource^{4,5}
(JORC 2012 Indicated & Inferred)
- 473Mt Maiden Ore Reserve⁶
(JORC 2012 Probable)
- Muster Dam historic Resource
(converting to JORC 2012 Resource)



*BIF: Banded Iron Formation, common host geology for West Australian magnetite deposits

Outstanding project location in South Australia

Close to rail, port & renewable energy supply



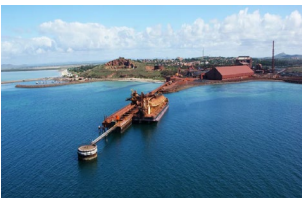
Adelaide

240km



Open-access rail

~50km



Whyalla Port

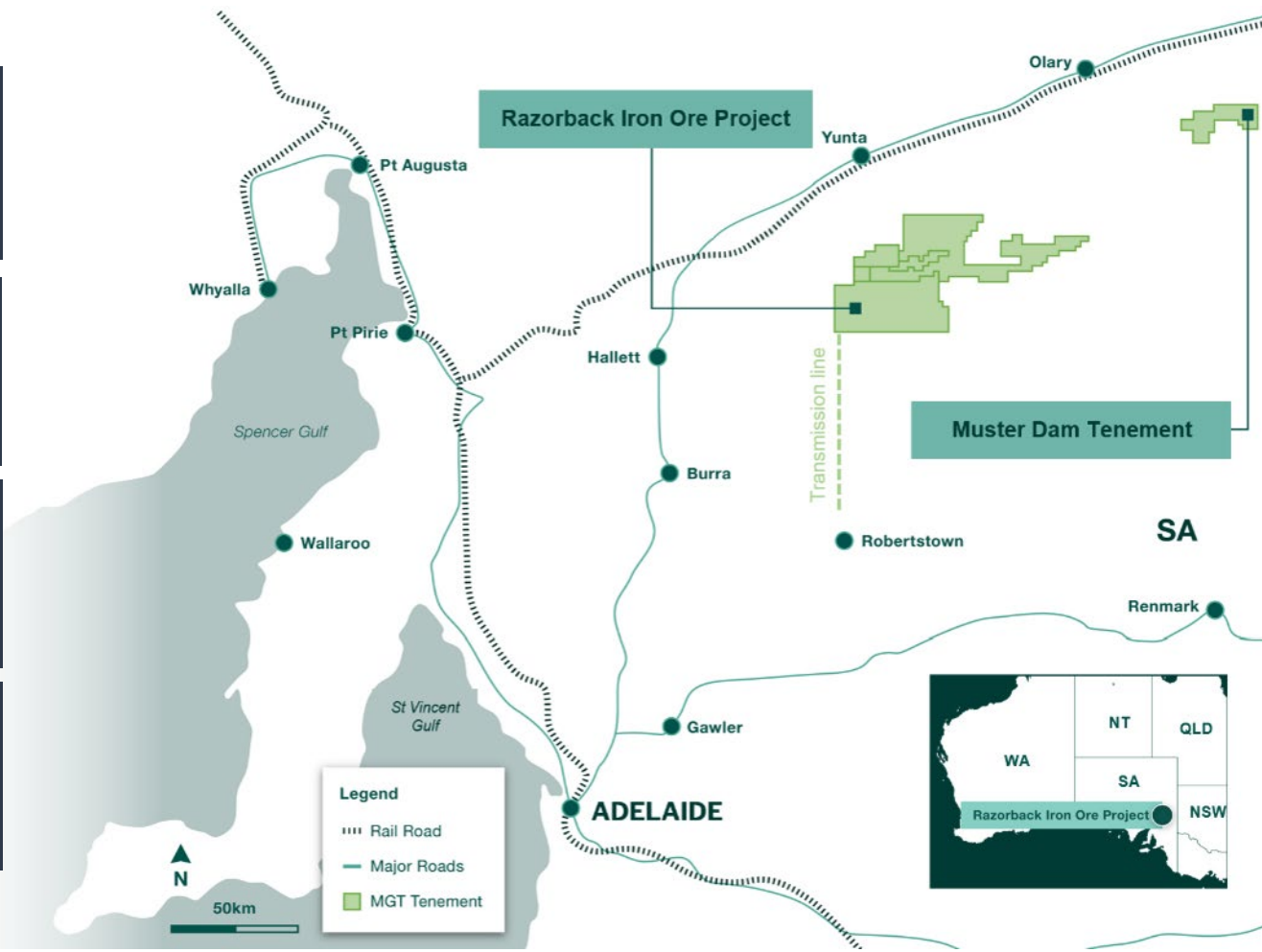
~315km



Grid Power

100% renewable by
2030⁸

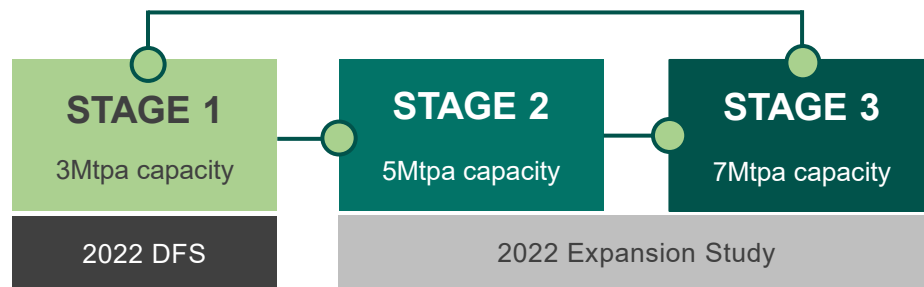
~125km



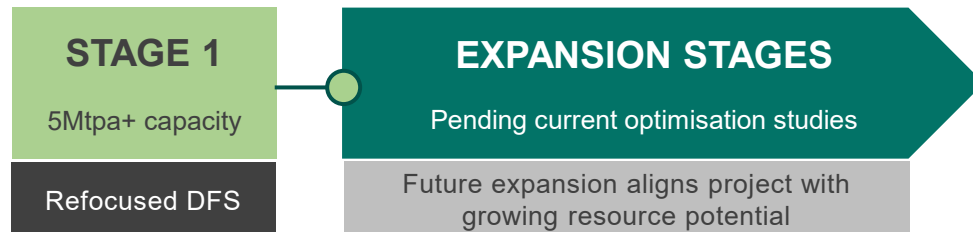
Commitment to staged development pathway⁶

Reduced risk, increases likelihood of success

Single-Step Expansion



Direct market feedback
Inflationary pressures – increasing costs
Superior expansion case economics
Growing resource base



Significant expansion benefits evident

Previous Study Outcomes:

	Unit	PFS Plant Optimised ^a	Single-Step Expansion
		Stage 1	Stage 1,3
Production capacity	Mtpa	3	3 → 7
Development capital	A\$m	665	1,985
Post-tax NPV-8	A\$m	660	→ 2,455
Post-tax IRR ^b	%	19%	→ 27%
All-in breakeven ^c	US\$/t	53	→ 40

- a) Expansion Study Stage 1 basis: PFS Plant Optimised case with 0.71 AUD:USD exchange rate
 b) 62% Fe iron ore price assumption of US\$110/t with quality adjustment premium of US\$25/t
 c) 62% Fe iron ore price equivalent break even price
 d) The Company confirms that all material assumptions underpinning the production targets and forecast financial information contained in the original 2022 Expansion Study announcement continue to apply and have not materially changed.

Work to date transferable to Refocused DFS

DFS workstreams have reduced project risk

Key outcomes for 2.5mtpa DFS

Best-in-class consultants engaged throughout



- Mining strategy optimisation



- 68% high-grade magnetite process flow sheet confirmed
- AACE Class 3 level of accuracy costs estimate for Process Plant / Tailings
- Tailings Storage Facility design to ANCOLD standards



- Road, rail and power infrastructure alignments selected
- Non-process infrastructure design completed



- Permitting, environmental and groundwater studies well advanced

Providing basis for refocused 5mtpa+ DFS

Optimisation studies commenced

- DR-grade product investigation
- Process Plant capacity minimum 5Mtpa
- Rail loop to site, eliminating road haul
- Near-site water capacity investigation for 5Mtpa scale

Other work in progress

- Port access negotiations
- Land access agreements options
- Indigenous Land Use Agreement (ILUA)
- Conversion of Muster Dam resource to JORC 2012 standard

Building our ESG platform

Founded on renewable energy use and global decarbonisation contribution

	MGT early action	ESG aspiration
Environmental sustainability	- Grid-connected power supply, high-embedded renewable generation - Sustainable, non-competing use of water	- GHG accountability - Renewable energy - Minimising scope 3 emissions - Water quality optionality - Early site closure planning
Social & community inclusion	- Early First Nations involvement - Inclusive approach built on trust - Local content in DFS program	- Stakeholder & community consent - Develop local supply opportunities - Targeted local employment
Accountable governance	MGT Compliance framework and Code of Conduct	- ESG framework and reporting - Shared capacity building with First Nations - Supply chain verification
People & culture	- Safety and wellbeing focus - Agile, responsive project planning	- Diverse teams, healthy culture - Individual capacity building - Role modelling organisation



Recording regional cultural heritage values with a Ngadjuri heritage team



Grid-connected power supply, forecast to be 100% renewable by 2030



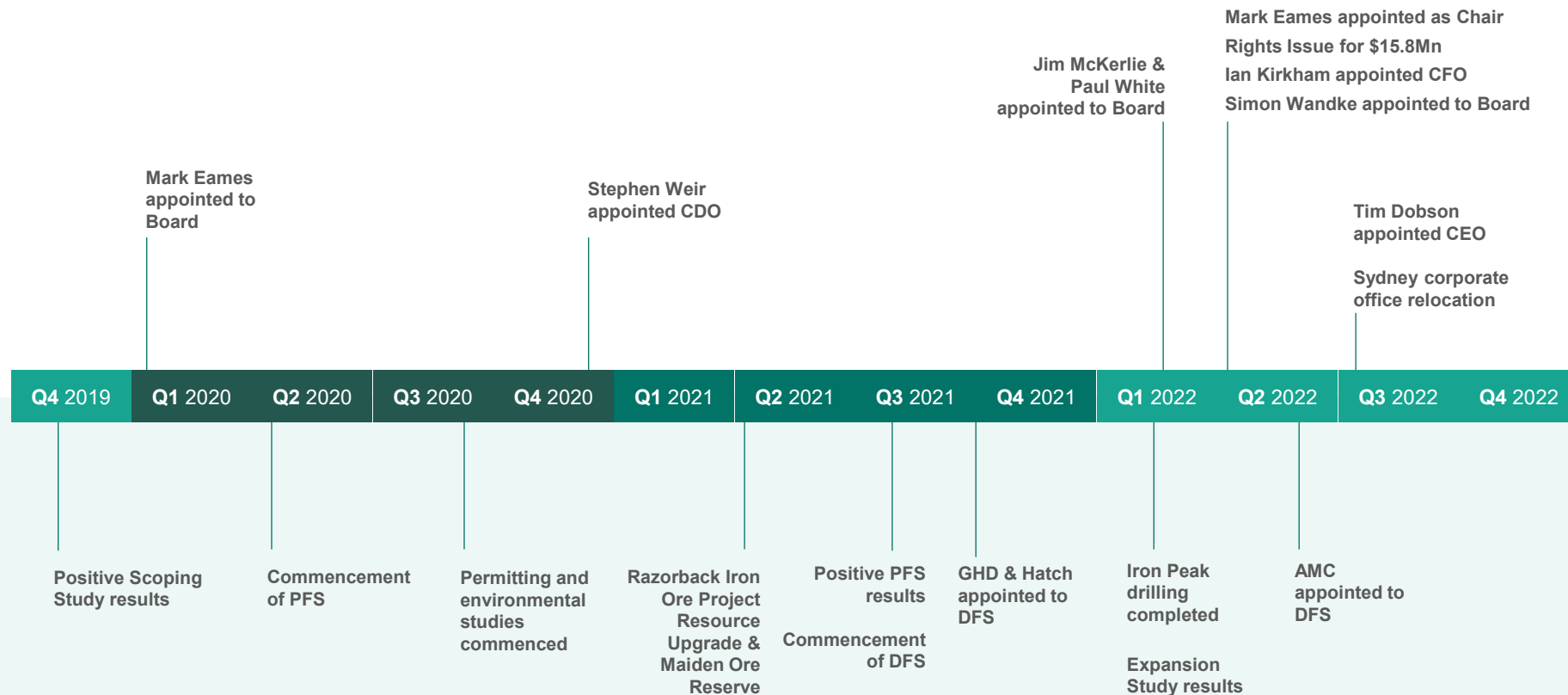
Premium-grade iron ore produces low emission steel

Magnetite Mines is transforming

Reflecting timing and acceleration of downstream industry needs

Corporate

Development



Recently strengthened Board

New governance team with deep corporate and resource credentials

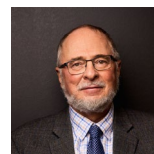
Board of Directors



Mark Eames Chair of the Board

BA Metallurgy (Hons) MBA MAUSIMM

- Global minerals industry experience
- Senior iron ore roles with Glencore, BHP, Rio Tinto
- Qualified metallurgist with international experience



Jim McKerlie Non-executive Director

BA Economics (Hons) Dip Fin Mgt

- International CEO and public company director
- Chaired four IPOs, depth of experience in technology & energy sectors
- Former Chair of Drillsearch and Beach Energy



Peter Schubert Non-executive Director

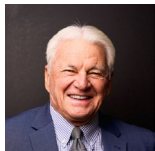
- Track record of developing resources sector businesses
- Magnetite Mines Executive Chairman Sep-18 to May-22
- Magnetite Mines Interim CEO Mar-21 to May-22



Paul White Non-executive Director

Master of Business Administration

- Background of driving organisational performance
- Former CEO of ASX-listed Brisbane Broncos
- Executive experience with Anglo American and Xstrata



Malcom Randall Non-executive Director

Dip Applied Chem, FAICD

- Corporate management and marketing resources executive
- Diverse commodities expertise, deep iron ore experience
- Over 25 years with the Rio Tinto group of companies



Simon Wandke Non-executive Director

BA Psych Mkt (Comm) G Dip Corp Fin

- 40+ years mining and minerals industry experience
- Highly accomplished C-suite leader
- Former EVP and CEO of ArcelorMittal Mining

New executive team

Combining leadership with corporate and international resource project experience

Executive Team



Tim Dobson Chief Executive Officer

B.AppSc Ext.Metallurgy, GAICD, MAusIMM

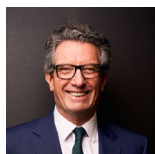
- 35 years extensive international mining experience
- Track record of developing, operating and transforming projects
- ASX CEO & international senior executive leadership roles



Ian Kirkham Chief Financial Officer

B.Ec Economics & Accounting

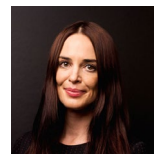
- Experienced resource company corporate executive
- Deep governance, risk and financial management experience
- CFO and Company Secretary roles at various ASX-listed companies



Stephen Weir Chief Development Officer

B.MechEng (Hons), GradDip.AppFin. (SIA)

- 20 years finance and project experience
- Corporate finance advisor to mining and energy sector clients
- Resources, industrial equipment, minerals and coal processing



Gemma Brosnan GM – External Affairs

BA Journalism (Hons)

- Corporate communications and investor relations professional
- 17 years extensive international experience in the UK & Australia.
- Commenced career as journalist with London Evening Standard.



Trevor Thomas Study Director

MEarthSci (Hons), MAIG, MAusIMM

- 14 years exploration & resource development geologist
- Lead for project management of all technical & feasibility studies
- Delivered Razorback Maiden Ore Reserve; acquired Muster Dam



Allan Kane GM – Sustainability

B.EnvMgmt (Hons), GradCertProjMgmt

- 14 years broad resources sector experience
- Lead for all aspects of sustainability and corporate ESG framework
- Previous roles with SA Department for Energy and Mining

Corporate overview

Market Cap

\$98.5M

(Share price \$0.026 6 Oct 2022)

Cash

\$19.3M

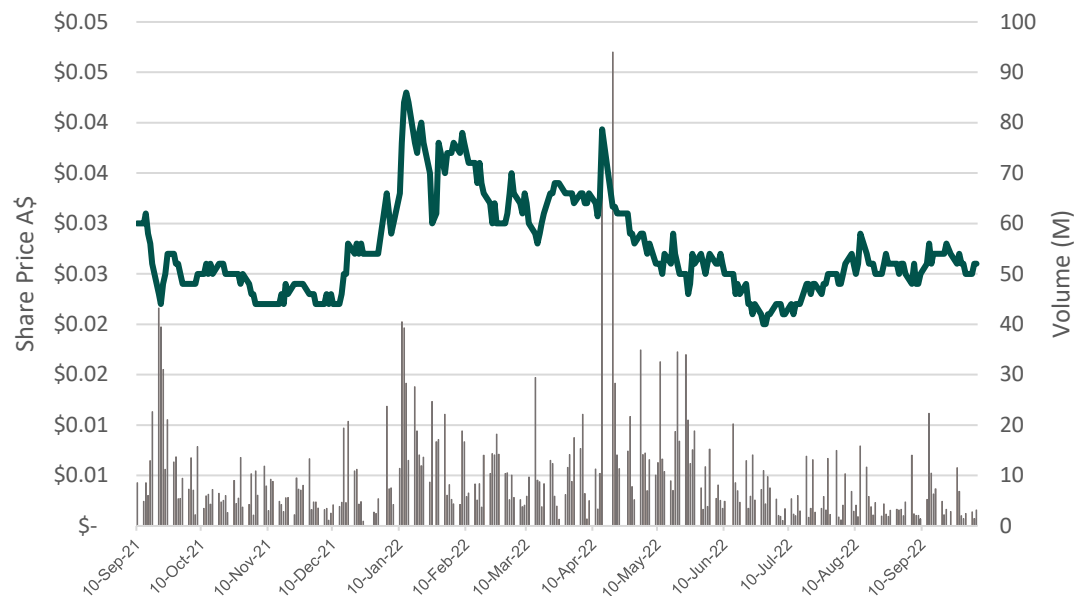
(30 Jun 2022)

Shares on Issue: 3,791M

Listed options MGTOE: 363.3M

Options: 152.3M*

Share Performance and Register



Other Shareholders: 68.5%

Top 20: 26.4%

5% Board and Management

Delivering premium iron ore to high demand markets

Decarbonisation Tailwind

Premium iron ore needed now to enable low emission iron & steelmaking

Outstanding Project Credentials

Tier 1 location
4.2 billion tonne Resource
Existing port & rail access

Committed to Staged Development

Refocused DFS with
Stage 1 capacity matched to market and risk profile

Progressing to Development

Strengthened Board
New management team
Corporate presence

References

1. 2022 World Steel Association - Global crude steel production, Mt
2. Toward a Fossil Free Future with HYBRIT: Development of Iron and Steelmaking Technology in Sweden and Finland. Metals. 2020
3. Magnetite Mines' analysis; 'Can industry decarbonize steelmaking?' Chemical & Engineering News, 2021; Goldman Sachs
4. ASX Announcement – 24/05/21 – Razorback Iron Project Mineral Resource Upgrade
5. ASX Announcement – 20/11/18 – Ironback Hill Deposit – JORC 2012 Resource Update
6. ASX Announcement – 30/06/21 - Maiden Ore Reserve for the Razorback Iron Project
7. ASX Announcement – 11/05/22 – Magnetite Mines Secures Muster Dam Tenement
8. Government of South Australia – Energy and Mining – Leading the green economy
9. ASX Announcement – 05/07/21 – Positive PFS Results for Razorback Iron Project
10. ASX Announcement – 21/03/22 – Magnetite Mines Confirms Benefits of Expansion at Razorback
11. ASX Announcement – 21/07/22 - Positive Interim Metallurgical Test Results
12. Wood Mackenzie, Magnetite Mines research

Contact

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Appendix

Mineral Resources and Reserves

Mineral Resource	Ore (Mt, Dry)	Mass Rec (eDTR %)	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %	Magnetite %
Razorback Iron Ore Project								
Indicated	1,500	15.6	18.5	47.9	8.0	0.18	5.4	15.0
Inferred	1,500	16.0	18.0	48.3	8.2	0.18	5.5	15.9
Total	3,000	15.8	18.2	48.1	8.1	0.18	5.5	15.5
Ironback Hill								
Inferred	1,187		23.2	44.1	7.2	0.21	5.4	12.9

Ore Reserve Razorback Iron Ore Project	Ore (Mt)	Mass Recovery	Concentrate (Mt)
Probable	472.7	14.5	68.5

Muster Dam historic Mineral Resource Estimate not included in table.